From: <u>Jump, Christine</u>

To: <u>smith.martin@cleanharbors.com</u>; <u>Michael Stephenson</u>

Subject: Field observations

**Date:** Thursday, November 06, 2014 2:10:00 PM

## Marty and Mike-

I went to the Wichita site on Wednesday 11-6-14 to observe the excavation and sampling activities and identified a couple of concerns I wanted to discuss with you.

Soil sampling is being conducted with the terra core samplers; however, it was being done by transferring soil (which is primarily sand) from the backhoe bucket into a Ziploc bag and then using the terra core to collect the sample from the bag. This is not acceptable. The point to using the terra core sampler is to handle the soil as little as possible to minimize volatilization. When I asked them to collect the terra core samples directly from freshly exposed soil in the bucket, they did so, but expressed concern that the sample would only be collected from one location, and in the Ziploc they could mix the sample from different areas in the backhoe. What they were describing is essentially compositing of the sample and VOC samples should never be composited. The sample must be collected from a single, freshly exposed location. The terra core samples should always be collected first, prior to collecting the sample for PID screening, metals analysis or anything else.

The backhoe operator was sometimes having difficulty getting samples from the side walls and started to knock soil from the wall and collect it from the excavation floor. The samplers rejected the sample and requested the soil be collected from the side wall. The samplers indicated that previously there was a different piece of heavy equipment on site that made it easier to collect side wall samples but that equipment is no longer available.

I also noticed that a PID with an 11.7 eV lamp was being used for screening. When I asked why, I was told that the PID response had not been very good at the site and it was thought the ppbRAE 11.7 might help. An 11.7 eV lamp will potentially detect additional compounds; however it is less sensitive and less accurate than a 10.6 eV lamp (and more expensive). According to the RAE website, the 10.6 lamp is essentially 10 times more powerful than the 11.7 lamp. Since the primary compounds of interest at this site have an ionization potential less than 10.6 eV, I recommend using the 10.6 lamp.

The QAPP lists Anthony Carmelli as the field supervisor for the field work. Is this still accurate? I know the samplers are documenting the samples being collected and chain of custody forms, however, it is my understanding that they are not always on site while the excavation is

occurring. While asking questions about several site specifics (such as the vertical pipes in the building D excavation) I received inconsistent answers from different people, which concerned me. It is unclear to me who is performing the overall day to day field documentation for the IRM work, such as PID screening while removing "clean" soil over impacted soil, documenting staining and odors, or other anomalies (like the vertical pipes) and deciding whether additional sampling is necessary based on those observations, documenting when specific areas are being excavated, or backfilled, etc...

I am available today until 4:00 pm and should be available all day tomorrow if you would like to give me a call.

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